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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,550	07/30/2003	Darren L. Anand	BUR920030018US1	1549
28211	7590	09/27/2004	EXAMINER	
FREDERICK W. GIBB, III MCGINN & GIBB, PLLC 2568-A RIVA ROAD SUITE 304 ANNAPOLIS, MD 21401			WAMBACH, MARGARET R	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,550

Applicant(s)

ANAND ET AL.

Examiner

Margaret R Wambach

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: The hand written notations for elements 103 and 106 are not discernible. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: The pages of the specification are not numbered.

Appropriate correction is required.

Claim Objections

Claims 2-20 and 22-33 are objected to because of the following informalities: Unlike claims 1 and 21, which are clearly numbered, claims 2-20 and 22-33 have bracketed expressions beginning with a c and ending with a numeral on their margin.

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These expressions will be accepted as page numbers for purposes of the initial examination of this application but clear page numbering must be provided responsive to this office action. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification and drawings do not describe a circuit for observing data within a shift register or a plurality of shift registers without altering data, a method for observing data within a shift register without altering said data, and/or a program storage device readable by machine tangibly performing a method of observing data within a shift register without altering said data such that one skilled in the art could make and/or use the invention. The first problem a skilled worker would most likely have to overcome is that the outputs of multiplexer 106 and 110 are connected to each other through a portion of the wire loop according to Figure 1, paragraphs 0016 and 0022. Effectively, any signal output by either one of these multiplexers is going nowhere because their outputs face an open circuit. Similarly, the inputs of shift registers 112-114, or 121, are connected to the inputs of multiplexer 106. It is unclear

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how any signal is going to flow between two input terminals without a signal source being introduced from somewhere. Contrary to what is recited in the independent claim, it does not appear that data flows in a loop. In fact, it is unclear how data is introduced into this circuit because no input terminals for data (other than control data) are shown.

Similarly, neither the specification nor the drawings teach how data is observed in the present invention without being altered. On the contrary, the output of 107, which represents the data in one of the shift registers, is divided three times – once to drive both the output of the circuit, again to drive the line leading to the observe terminal and lastly to drive the line to multiplexer 110. Applicant also discusses recording all of the shift register data in 120, without stating how the data would be stored in 120 without degrading the contents as originally stored in the shift registers, circulating data through a closed loop and running the data through a counter after first clearing the shift register without ever explaining how these things could possibly be done without altering data. (How replacing the shift register's original contents with all zeroes is not considered altering its contents is particularly inexplicable.)

Lastly, applicant does not explain how the contents of the shift registers are observed while they are circulating on the loop. With or without altering the data, it is simply unclear how data is read. There is no mention of sampling (which would definitely alter the signals) or any sensor which would detect a magnetic or electric field created by the pulse without altering it. This function of observing data appears to be at the crux of the invention yet a skilled worker in the art would not be able to make the

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present invention so that it accomplishes that end based on the teachings of the disclosure.

Although none of the claims have been rejected under prior art, allowable subject matter has not been indicated because the structure and operation of the present invention is too unclear to determine the metes and bounds of the claims sufficiently so that a clear comparison can be made between the recited invention and the prior art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gheewala, DeGuise et al., Whetsel, Jr and How et al are relevant to the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret R Wambach whose telephone number is (571)272- 1756. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday 6am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571)272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Margaret R Wambach
Primary Examiner
Art Unit 2816

mrw